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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HUYNH, CHUCK

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/712,483

Applicant(s)

PECEN ET AL.

Examiner

Chuck Huynh

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Allowable Subject Matter

Regarding claim 18, it could be allowed for the fact that no references searched at this time can fully encompass the claim's limitation with the specific formulas, in that in that specific order of application.

Furthermore, claim 18 should only have one period at the **end** of the claim language. Until appropriate correction is made, the claim is not in condition for allowance.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2683

2. Claim 1-9, 14, 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Gwon et al. (hereinafter Gwon).

Regarding claim 1, Gwon discloses a method of operating a mobile communication device, comprising the steps of:

calculating parameters indicative of received signal strength over time (Page 2-3: [0024] ;

determining whether a predetermined relationship exists between the values of the parameters (Page 1-2: [0011], [0012]); and

determining reselection is imminent if said predetermined relationship exists (Page 3: [0024]).

Regarding claim 2, Gwon discloses the method as defined in claim 1 , where said step of determining whether a predetermined relationship exists determines how many predetermined conditions exist (Page 1: [0009]).

Regarding claim 3, Gwon discloses the method as defined in claim 1, wherein said step of calculating includes measuring received signal strength (Page 2-3: [0024]).

Regarding claim 4, Gwon discloses the method as defined in claim 3, wherein said step of calculating includes computing a plurality of parameters as a mean of the received signal strength measurements (Page 1: [0009], [0010]).

Regarding claim 5, Gwon discloses the method as defined in claim 4, wherein said step of determining if at least one predetermined criteria is met determines if a plurality of parameters are met (Page 3: [0027]; Page 1-2: [0009-0013]).

Regarding claim 6, Kwon discloses the method as defined in claim 1, further including the step of sending a message to at least one of a visual bearer and a network upon determining that a reselection is imminent (Page 3: [0031]).

Regarding claim 7, Kwon discloses the method according to claim 1, further including the step of calculating a relative time for said reselection (Page 3: [0025]).

Regarding claim 17, Kwon discloses the method according to claim 7, wherein said step of calculating further includes performing an n-points sliding parabola calculation by finding required initial sums (mean) based on the first y_j reselection criteria values (prediction parameters) at corresponding moments t_j (Page 3: [0029]).

Regarding claim 8, it is inherent that the method according to claim 1, further including the step of receive threshold information from the network for controlling mobile reselection (such as signal strengths disclosed in Kwon: Page 2-3 [0024]).

Regarding claim 9, Kwon discloses the method of claim 1, wherein the step of computing comprises performing RSSI measurements (Page 2-3: [0023-0024]).

Regarding claim 14, Kwon discloses a mobile communication device, comprising:
a measurement module (Page 2-3: [0024]);
a reselection predictor coupled to the measurement module, the reselection predictor producing in the mobile communication device a likelihood of cell reselection message based on measurements made by the mobile (Page 2-3: [0024]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwon in view of Tuutijarvi et al. (hereinafter Tuutijarvi).

Regarding claim 10, Kwon discloses all the particulars of the claim but is unclear on the method of claim 9, wherein the RSSI measurements are computed every time division multiple access frame in a temporary block flow mode.

However, Tuutijarvi does disclose the RSSI measurements are computed every time division multiple access frame in a temporary block flow mode (Col 4, lines 21-27).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Tuutijarvi's disclosure to provide a method to measure received signal strength in a TDMA system.

5. Claim 11-13, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwon in view of Terasawa.

Regarding claim 11, Kwon discloses all the particulars of the claim but is unclear on the method according to claim 1, further including the step of initiating flow control in response to determining that reselection is imminent

However, Terasawa discloses the method according to claim 1, further including the step of initiating flow control in response to determining that reselection is imminent (Page 8, [0070]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to incorporate Terasawa's disclosure to provide handover for connectivity.

Regarding claim 12 Terasawa discloses The method of claim 11, further including the step of entering flow control in the virtual bearer (remote unit buffers 10s) responsive to a signal received from the network (Page 8: [0069-0070]).

Regarding claim 13. The method of claim 11, further including the step of entering flow control in the virtual bearer responsive to the message that reselection (handoff) is imminent (Page 8, [0070]).

Regarding claim 15, Kwon discloses all the particulars of the claim even the layers of determining a cell change is imminent (L2 and L3 through of reference) but is unclear on the mobile communication device according to claim 14, further including a virtual bearer for applying flow control to the lower layers, the virtual bearer applying flow control responsive to a determination that a cell change is imminent.

However, Kwon in combination with Terasawa does disclose the mobile communication device according to claim 14, further including a virtual bearer for applying flow control to the lower layers, the virtual bearer applying flow control responsive to a determination that a cell change is imminent (Page 8: [0069-0070]).

It would have been obvious to one ordinarily skilled in the art at the time of invention to combine Terasawa with Kwon to provide procedures of establishing connectivity during handover.

Regarding claim 16, Terasawa discloses the mobile communication device according to claim 15, wherein the virtual bearer (buffer inherent within remote device) is coupled to the reselection predictor to receiving the likelihood of cell reselection message from the predictor (Page 8: [0069-0070]).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Huynh whose telephone number is 571-272-7866. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chuck Huynh


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